DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-019242 Address: 333 Burma Road **Date Inspected:** 13-Jan-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Liu Hua Jie **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

ZPMC SHIP # 18

This QA Inspector performed photo documentation along with Caltrans QA inspector (Mr.Reddy) on segment lift 11 (East) located on ZPMC ship # 18 prior to being shipped to San Francisco California for erection. The following locations and members documented are as followed:

Lift 11 West (Panel Point 103~108) following sequence pictures documented

Segment # 11 West

- 1. Intermediate Corner Assembly for cross and vertical truss post bolting area (Cross Beam and Counter Weight Side).
- 2. Longitudinal Diaphragm Counter Weight side of segment.
- 3. Longitudinal Diaphragm Crossbeam side of segment.

WELDING INSPECTION REPORT

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- 4. Corner Assembly covering overall view, Deck Panel I-stiffeners, Edge Panel I-Stiffeners and Side Cross Beam and Counter Weight Side.
- 5. Sea fasteners installed at the Bottom Panel facing west and facing east Cross Beam and Counter Weight Side.
- 6. Floor Beam- Cross Beam and Counter Weight Side facing west and facing east.
- 7. Lower and Upper Chevron with sea fastening structures Cross Beam and Counter Weight Side facing west and facing east.

WELDING:

Segment 12BE

This QA Inspector observed ZPMC qualified welding personnel identified as 044515 perform Flux Core Arc Welding (FCAW), weld joint identified as SEG3002A-001; located On Orthotropic Box Girder (OBG) Bottom Plate to Side Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr.Liu Hua Jie. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2214-B-U2-FCM-1. See attached photo for further details.

Segment 12CE

This QA Inspector observed ZPMC qualified welding personnel identified as 040458 perform Flux Core Arc Welding (FCAW), weld joint identified as SEG3002M-090; located On Orthotropic Box Girder (OBG) Bottom Plate to Longitudinal Diaphragm CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Liu Hua Jie. The welding variables recorded by QC appeared to comply with applicable WPS-B-T-2232-ESAB. See attached photo for further details.

Segment 12BE ~ 12CE

This QA Inspector observed ZPMC qualified welding personnel identified as 044504 perform Shielded Metal Arc Welding (SMAW), weld joint identified as LD3010-001-058; located On Orthotropic Box Girder (OBG) Side Plate T-rib Hold Back Fillet Weld; ZPMC Quality Control (QC) is identified as Mr. Liu Hua Jie. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2112-FCM-1.

Segment 12BE ~ 12CE

This QA Inspector observed ZPMC qualified welding personnel identified as 040458 perform Flux Core Arc Welding (FCAW), weld joint identified as SEG3002M-090; located On Orthotropic Box Girder (OBG) Corner Assembly Edge Plate to Edge Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Liu Hua Jie. The welding variables recorded by QC appeared to comply with applicable WPS-B-T-2231-ESAB.

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.

WELDING INSPECTION REPORT

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Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhune, Manoj	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer